

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A computer-implemented method for processing a plurality of toponyms, said method comprising:

based on an analysis of all the documents within a large corpus of documents, identifying geo-textual correlations among readings of ~~the~~ toponyms within the plurality of toponyms, wherein the geo-textual correlations are statistics derived for the corpus of documents rather than for any individual document within the corpus of documents; and

for each toponym ~~selected from~~ within the plurality of toponyms, using the identified geo-textual correlations to generate a value for a confidence that an occurrence of that ~~the selected~~ toponym within a particular document refers to a corresponding particular geographic location.

2. (Currently Amended) The computer-implemented method of claim 1 further comprising using the value for the confidence[[s]] generated for each toponym within the plurality of toponyms to rank documents according to their relevance to a search query.

3. (Currently Amended) The computer-implemented method of claim 1 further comprising selecting a set of ~~initial~~ starting values which for each toponym within the plurality of toponyms establishes an initial value for the confidence[[s]] that the occurrence of that toponym within the particular document refers to the corresponding particular geographic location ~~for the plurality of toponyms~~, and wherein using the identified geo-textual correlations to generate values for confidences involves modifying the ~~set of~~ initial values based on the identified geo-textual correlations within the corpus.

4. (Currently Amended) The computer-implemented method of claim 3 wherein selecting the set of ~~initial~~ starting values for the confidences for the plurality of toponyms involves using a method of uniform priors.

5. (Original) The computer-implemented method of claim 1 wherein identifying geo-textual correlations involves identifying within documents in the corpus toponyms that have associated geographic locations that are nearby to each other.

6. (Original) The computer-implemented method of claim 1 wherein identifying geo-textual correlations involves identifying spatial correlation among geographic references of toponyms that are in textual proximity.

7. (Original) The computer-implemented method of claim 6 wherein textual proximity means within the same document.

8. (Original) The computer-implemented method of claim 6 wherein textual proximity means within the same document or any document closely linked with said same document.

9. (Original) The computer-implemented method of claim 1 further comprising processing the corpus by a named entity tagger prior to identifying the geo-textual correlations.

10. (Currently Amended) A computer-implemented method of generating information useful for ranking a target document that includes a plurality of toponyms for which there is a corresponding plurality of (toponym, place)-pairs, there being associated with each (toponym, place) pair of said plurality of (toponym, place) pairs a corresponding value for a confidence that the toponym of that (toponym, place) pair refers to the place of that (toponym, place) pair, said method comprising:

for a selected (toponym, place) pair of the plurality of (toponym, place) pairs that is found within the target document,

(1) obtaining a pre-computed initial value for the value of the confidence that the toponym of the selected (toponym, place) pair refers to the place of the selected (toponym, place) pair, said pre-computed initial value derived from a statistical observation about a large corpus of documents;

(2) determining if another toponym is present within the target document that has an associated place that is geographically related to the place referred to by of the selected (toponym, place) pair; and

[[(2)]] (3) if a toponym is identified within the target document that has an associated place that is geographically related to the place referred to by ~~of~~ the selected (toponym, place) pair, boosting the value of the confidence for the selected (toponym, place) pair for the target document.

11. (Currently Amended) The computer-implemented method of claim 10, wherein determining if another toponym is present within the target document that has an associated place that is geographically related to the place referred to by the ~~of that~~ selected (toponym, place) pair involves identifying another toponym that has an associated geographic region that encompasses the place referred to by ~~of~~ the selected (toponym, place) pair.

12. (Currently Amended) The computer-implemented method of claim 10, wherein determining if another toponym is present within the target document that has an associated place that is geographically related to the place referred to by the ~~of that~~ selected (toponym, place) pair involves identifying another toponym that has an associated place that is geographically nearby the place referred to by ~~of~~ the selected (toponym, place) pair.

13. (Currently Amended) The computer-implemented method of claim 12, further comprising computing a geographical distance between the place associated with the identified toponym and the place referred to by ~~of~~ the selected (toponym, place) pair.

14. (Currently Amended) The computer-implemented method of claim 13 wherein boosting involves calculating an adjustment value by computing an adjustment boosting function with the computed geographical distance as an input variable, said adjustment boosting function being monotonically decreasing for increasing values of the input variable.

15. (Original) The computer-implemented method of claim 14 wherein boosting involves deriving an initial boosting value from input including the calculated adjustment value.

16. (Currently Amended) The computer-implemented method of claim [[14]] 15 wherein boosting involves applying a sigmoid function to the derived initial boosting value to compute a final boosting value and modifying the value of the confidence for the selected (toponym, place) pair by an amount determined by the final boosting value.

17. (Currently Amended) The computer-implemented method of claim 11 further comprising:

performing steps (1), (2) and (3) ~~[[(2)]]~~ for each (toponym, place) pair among the plurality of (toponym, place) pairs that is found within the target document to generate modified values for the confidences for the plurality of (toponym, place) pairs that are found within the target document; and

using the modified values to rank the target document~~[[s]]~~ according to the target document's ~~their~~ relevance to a search query.

18. (Canceled).

19. (Canceled).

20. (Previously Presented) The method of claim 1, wherein generating the value for a confidence that the selected toponym refers to a corresponding geographic location does not involve using information extrinsic to the corpus.